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RECORD OF ORAL HEARING

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

*Ex parte* REINHOLD BURR, DIERTRICH KLINGLER  
and KLAUS VOIGT

Appeal 2009-002693  
Application 10/528,566  
Technology Center 3700

Oral Hearing Held: September 22, 2009

Before JENNIFER D. BAHR, MICHAEL W. O'NEILL and FRED A. SILVERBERG, *Administrative Patent Judges*.

ON BEHALF OF THE APPELLANT:

**MATTHEW J. KREMER, ESQ.**  
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The above-entitled matter came on for hearing on Tuesday, September 22, 2009, commencing at 10:13 a.m., at the U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia, before Jennifer O'Connor, Notary Public.

PROCEEDINGS

THE CLERK: Calendar No. 68, Mr. Kremer.

JUDGE BAHR: Good morning, Mr. Kremer.

MR. KREMER: Yes. I have a handout to the members of the Board.

JUDGE BAHR: Okay. You can begin whenever you're ready.

MR. KREMER: Thank you very much. Good morning. Today we are here to discuss the Application for an air inlet for a motor vehicle. The purpose or the principle behind this is that the air inlet has two ducts that channel air flow into different sections of an outlet region, one that imparts a more directed flow towards an occupant or object to be cooled and another region that provides a swirl, a more diffuse flow. The idea is being able to control how directed you want the air flow to be sent through the channel.

Figure 1, or page one and page two of the handout I have here, the air inlet of the present Application, in which Reference No. 1 indicates the air inlet as a whole. The air duct is numeral two, and there is a metering device, number three. The air guiding device, number four, has two subducts (11 and 12). 11 indicated in the red and subduct 12 in the yellow.

Now I'll direct it more to the language used in the claims, for Claim 15, the air guiding device number four has two ducts (11 and 12), and an outflow region, which is shown on the second page, in which the two subducts go to this outlet region. One duct, No. 11, leads towards a middle region of the outlet, while the other subduct leads to an outer circumferential region that partially surrounds the middle region.

For Claim 28, it is worded that one of the subducts has a coiled or elongated helical region, which is Claim 12. For Claim 13, one of the

1 subducts, which is in this case subduct (11), imparts a spot action, which is  
2 towards the center of the outlet, and another subduct imparts a swirl, which  
3 is subduct (12). That's how the claims are arranged, and the primary  
4 reference is Kinmartin, which is shown in page three of the handout.

5 Now Kinmartin discloses a heating and air conditioning apparatus.  
6 There are two main components. The first one is the heater, evaporator and  
7 blower assembly (10), which is shown in the green, and there is a modular  
8 duct assembly (12), which is shown in yellow. The assembly (10) includes a  
9 blower. Air is sucked through the inlet (14), channeled through the blower  
10 to a heat exchanger assembly (22).

11 The heat exchanger assembly has an evaporator which the air goes  
12 through, but then the flow can be channeled one of two ways. It can be  
13 channeled through a heater core or it can be bypassed, so you have an option  
14 of heat or cold flow. In the heating exchanger assembly 22, the flow is  
15 channeled into two different passages, 36B and 36A. From the assembly  
16 (10), it goes into the modular duct assembly where it directs the flow to the  
17 various compartments.

18 Going to page four, it shows the initial entry flow passage, the air  
19 flow going through the inlet down through being sucked into the blower and  
20 up and through the heat exchanger assembly, until it reaches the modular  
21 duct assembly (12). On page five, there are now two passages for the  
22 modular duct assembly, an upper and lower passage as indicated in the  
23 reference.

24 Page five shows the flow passage of the upper duct assembly, in  
25 which it approaches a first directed door, which permits the flow to be  
26 directed down to the lower discharge fence, or to continue upward along the

1 path to other ducts or other vents, which are the upper level discharge vent  
2 and the defogger vent. So essentially, there's one passage that has a fork in  
3 the road, if you will, in which it goes down to the lower level discharge or it  
4 can continue forward.

5 When it continues forward, there's another door that directs it either to  
6 the upper discharge vents or to the defogger vents. On page six of the  
7 handout, essentially it is the same arrangement for the lower passage. It has  
8 its own lower discharge vent that it feeds down through, or it goes, continues  
9 in the passage and goes to either the upper level discharge vent or the  
10 defogger discharge vent. Naturally, both of these two passages depends on  
11 whether it's the passenger or driver side of the vehicle. So that is the  
12 description of Kinmartin.

13 Now to the Examiner's analysis of the claims, there is -- we'll start  
14 with Claim 15, which is a 102 rejection, based on just Kinmartin by itself.  
15 In this case, the Examiner contends that the assembly (10) in the green is  
16 considered the air inlet assembly. The metering device of the claim is the  
17 control doors (30A and 30B), and that can be better seen on page three of the  
18 handout.

19 Then the modular duct assembly (12) was considered to be the air  
20 guide device, and the subducts for dividing the air were channels (36A and  
21 36B).

22 The Examiner then contended that the outflow region of this device  
23 was found to be the entire modular duct assembly (12), in which the outer  
24 circumferential region was the defogger vents (46A and 46B), and the  
25 middle region was considered to be the passage 58, which led down to the  
26 lower discharge vent of the upper passage.

1 Channel 36B was considered the one duct that led to the middle, that  
2 led to the vertical passage (58), and another duct (36A), which leads to the  
3 defogger vent (46A) as well. We find that there are some serious issues,  
4 errors with the Examiner's analysis, one initially being that she considers the  
5 entire modular duct assembly (12) to be the air guiding device, but also the  
6 entire thing is considered an outflow region.

7 That is not a reasonable interpretation. The entire modular assembly  
8 has an inlet that allows air into the assembly. It has walls. Flow cannot flow  
9 through the walls, and it's not considered that at that inlet that there is an  
10 outflow of air.

11 JUDGE O'NEILL: Excuse me, counsel. So you said that the  
12 Examiner considered Structure 12, to read on both the air guiding device and  
13 the outer flow region?

14 MR. KREMER: Yes.

15 JUDGE O'NEILL: And you're saying that's an error on the part of the  
16 Examiner. Why?

17 MR. KREMER: Because the idea of having an outflow region for the  
18 entire modular assembly being a structure, a flow of air cannot go through  
19 this outflow if there are walls that are attached, if flow is coming in an inlet.  
20 The section of the inlet cannot be considered an outlet region. So using the  
21 entire module as an outflow assembly is not its regular meaning. It should  
22 be a section or an area in which there's an outflow of air.

23 Using the interpretation that the entire assembly (12) is in an outflow  
24 region, she then contends that defogger vents (46A and 46B), are outer  
25 circumferential regions, and the passage 58 is a middle region. Here, the  
26 error in the analysis is that the defogger vents are not partially surrounding

1 the passage (58), and as a matter of fact, these are two completely different  
2 areas of outflow region.

3 The idea of having outer circumferential region in the middle region,  
4 these are to work in concert at an outflow region. Here, she has used two  
5 different outflows. Passage 58 is considered a middle region, but it's not in a  
6 middle region of an outflow. It is essentially a vent by itself.

7 JUDGE O'NEILL: Counsel, where -- maybe I missed this. Where is  
8 the limitation in the claims of partially surrounding?

9 MR. KREMER: It's connoted by the term "outer circumferential."

10 JUDGE O'NEILL: So outer circumferential region is supposed to be  
11 interpreted as partially surrounding --

12 MR. KREMER: The middle region.

13 JUDGE O'NEILL: The middle region.

14 MR. KREMER: To give meaning to the word "outer circumferential"  
15 would mean that it would have to be partially surrounding beyond the outer  
16 border. That one definition of circumference is the primer of a circle or an  
17 external boundary or surface of a figure or object. So it would have to be  
18 surrounding another region, and from the context of the claim, when there's  
19 a middle region to be referred to, the outer circumferential would be  
20 necessarily be partially surrounding the middle region.

21 So and in the case of the Examiner's analysis, the defogger or  
22 discharge vents are not partially surrounding the outlet passage (58), and it is  
23 not reasonable or one of ordinary skill in the art would not presume that the  
24 discharge vent, the defogger vent would be partially surrounding the lower  
25 level discharge event (58). Moving on to Claim 28, which does also recite  
26 an air inlet that or an air inlet metering device and an air guide device with

1 subducts for dividing air, it has the limitation wherein one subduct has a  
2 coiled or elongated helical region.

3 The Examiner concedes that Kinmartin does not show coiled or an  
4 elongated helical region. But she then relies on the reference of Kamiya,  
5 which is related to a lower housing. She says that it would be obvious to  
6 connect this lower housing to the outlet of one of the vents on the modular  
7 duct assembly (12), to -- and to provide, because it would produce a more  
8 efficient air flow and reduce noise.

9 The analysis that the Examiner puts forth has several problems. One  
10 is that one would not get more efficient air flow by putting an obstruction of  
11 a blower casing at the outlet of a vent. As a matter of fact, you would get  
12 less efficient. It would be less efficient. Also, to reduce noise, that  
13 suggestion comes from Kamiya, but this is a blower casing. The idea is to  
14 reduce noise so that the blower. It's not really applicable for the channeling  
15 of air.

16 And the whole idea of essentially just putting a blower casing on an  
17 outlet of an air distribution just to reduce power is really done just so that  
18 you can include the limitation of a coiled or elongated helical region. It  
19 betrays the idea that this is using improper hindsight.

20 JUDGE O'NEILL: So are you saying, counsel, that the examiner  
21 might have erred. There's no rationale understanding to the reason she  
22 gave?

23 MR. KREMER: Yes. That is correct. Essentially using the blower  
24 casing, if she is suggesting that we use it to help channel air, that is a  
25 different function for this blower casing. The blower casing is used to house



1 the blower, and she is using it to help channel air into a swirl, to produce  
2 more efficient air flow.

3 JUDGE O'NEILL: Was there any disclosure in the Kamiya reference  
4 that it produces a swirl of air?

5 MR. KREMER: It is on Column 1 in the Background of the  
6 Invention, where it speaks about generally using a casing to  
7 produce -- having a swirl channel. Specifically, it is Column 1, lines 29  
8 through 35, where it talks about a casing, where a side opposite to the  
9 suction port is enlarged in a spiral fashion, as to project a greater extent  
10 gradually from a start of winding position toward an end of winding  
11 position. That was her initial citation used in the rejection for Kamiya  
12 providing a swirl flow.

13 In the analysis related to Claim 33, Claim 33 also includes an air duct,  
14 a metering device and an air guiding device with a plurality of subducts for  
15 dividing air. It has the additional feature of wherein the subduct is  
16 configured to impart a spot action to the air, at an exit of the air duct, and  
17 another subduct is configured to impart a swirl to the air at the exit of the air  
18 duct.

19 This is a similar -- she engaged in a similar analysis of Claim 28, in  
20 which she added a blower casing to the exit of one of the vents of the -- one  
21 of the vents of Kinmartin. But in her analysis, she doesn't make clear which  
22 vent is supposed to have the blower casing. But in any case, again the same  
23 argument applies, that she is taking a blower casing, putting it on the exit of  
24 a vent, which is something one of ordinary skill in the art would not do,  
25 because it would provide less efficient air flow, and essentially you're just  
26 putting an obstruction in the way.

1           An additional note from the Examiner, and it's unclear on the  
2 Examiner's Answer if this is supposed to be a different rejection or how it's  
3 supposed to fit with the current combination of Kinmartin and Kamiya. But  
4 she does point out or she asserts that channel 36 of Kinmartin imparts a spot  
5 action at vent 46A, one of the defogger vents, and channel 36B inherently  
6 imparts a swirl at vent 46B, which is the other defogger vent.

7           She doesn't go into why it is inherently the same two vents. One  
8 imparts a spot action and another imparts a swirl. The Kinmartin reference  
9 doesn't disclose that one of the vents inherently imparts a swirl. It looks like  
10 from the disclosure that it just has a more direct straight air flow coming out  
11 of the defogger vents.

12           So in this case, for Claim 15, the idea of using different vents and then  
13 asserting that this is all one outflow region, which there's -- that form a  
14 middle region and an outer circumferential region, is simply not taught by  
15 Kinmartin. As far as the analysis of Claims 28 and 33, one of ordinary skill  
16 in the art would simply not put a blower casing on the outlet of an air  
17 distribution duct. Are there any questions, members of the Board?

18           JUDGE BAHR: No, no. I think we understand your position. Thank  
19 you.

20           MR. KREMER: Okay, thank you.

21           JUDGE BAHR: Do you have a business card by any chance for the  
22 reporter?

23           MR. KREMER: I hope I did. I'm sorry.

24           JUDGE BAHR: It just helps with the spelling, but we can get that.

25           (Whereupon, at 10:33 a.m., the proceedings were adjourned.)